

CLAIMS:

What is claimed is:

- 1 1. A data processing system implemented method for managing data from a plurality
2 of ancillary systems comprising:
3 receiving a request for a value of a data item;
4 identifying an ancillary system associated with the requested data item;
5 determining whether data stored in the ancillary system is conducive to being
6 processed into the value;
7 retrieving the data from one of the ancillary systems and the data processing
8 system based on whether data stored in the ancillary system is conducive to being
9 processed into the value;
10 processing the data into the value for the data item; and
11 returning the requested value for the data item.
- 1 2. The data processing system implemented method recited above in claim 1,
2 wherein the data is retrieved from the data processing system, the method further
3 comprises:
4 identifying all data updated in the ancillary system since a last block transfer of
5 data to the data processing system;
6 requesting a block transfer of updated data from the ancillary system; and
7 copying the block of updated data to the data processing system.
- 1 3. The data processing system implemented method recited above in claim 2,
2 wherein processing the data into the value for the data item is performed subsequent to
3 copying and prior to receiving the request.

1 4. The data processing system implemented method recited above in claim 2,
2 wherein processing the data into the value further comprises aggregating the data into a
3 value for the data item.

1 5. The data processing system implemented method recited above in claim 1,
2 wherein the data item is financial information.

1 6. The data processing system implemented method recited above in claim 2,
2 wherein the data processing system further comprises rules for managing data, said rules
3 comprise:
4 rules for identifying an ancillary system that is associated with a data item; and
5 rules for determining whether data stored in the ancillary system is conducive to
6 being processed into the value.

1 7. The data processing system implemented method recited above in claim 1,
2 wherein the data is retrieved from the ancillary system, and retrieving the data further
3 comprises:
4 attempting to contact the ancillary system;
5 querying the ancillary system for the data; and
6 receiving the data from the ancillary system.

1 8. The data processing system implemented method recited above in claim 1,
2 wherein retrieving the data from one of the ancillary systems and the data processing
3 system further comprises:
4 attempting to contact the ancillary system based on the data stored in the ancillary
5 system being conducive to being processed into the value; and
6 receiving the data from the ancillary system based on the ancillary system being
7 unresponsive.

1 9. The data processing system implemented method recited above in claim 2,
2 wherein the ancillary system is a first ancillary system and the request is a first request
3 for a first value for a first data item, the method further comprises:
4 receiving a second request for a value of a second data item;
5 identifying a second ancillary system associated with the second data item;
6 determining whether data stored in the second ancillary system is conducive to
7 being processed into the value;
8 retrieving the data from the second ancillary system based on the data stored in
9 the second ancillary system being conducive to being processed into the value;
10 processing the data into the value for the second data item; and
11 returning the requested value for the second data item.

1 10. The data processing system implemented method recited above in claim 1 further
2 comprises:
3 catching a message, wherein the message was generated by an ancillary system
4 using a set of content rules and the message conforms to a message standard;
5 opening the message;
6 identifying the ancillary system based on the message;
7 accessing content conversion rules based on the identity of the ancillary system;
8 converting content from the message to enterprise information using the content
9 conversion rules; and
10 storing the enterprise information in the data processing system.

1 11. The data processing system implemented method recited above in claim 7,
2 wherein the ancillary system is a first ancillary system and the request is a first request
3 for a first value for a first data item, the method further comprises:
4 receiving a second request for a value of a second data item;
5 identifying a second ancillary system associated with the second data item;
6 determining whether data stored in the second ancillary system is conducive to
7 being processed into the value;
8 retrieving the data from the data processing system based on the data stored in the
9 second ancillary system not being conducive to being processed into the value;
10 processing the data into the value for the second data item; and
11 returning the requested value for the second data item.

1 12. The data processing system implemented method recited above in claim 1,
2 wherein the data item is a line item in a document.

1 13. The data processing system implemented method recited above in claim 1,
2 wherein the data item relates to financial information, and the financial information is in
3 a document.

1 14. The data processing system implemented method recited above in claim 1,
2 wherein prior to identifying an ancillary system associated with the requested data item
3 the method comprises:
4 calling a security model for requestor security information;
5 receiving the requestor security information from the security model; and
6 accessing a security key related to the requested data item based on the requestor
7 security information.

1 15. The data processing system implemented method recited above in claim 1,
2 wherein prior to identifying an ancillary system associated with the requested data item
3 the method comprises:

4 determining whether the data item relates to employee information or financial
5 information;

6 accessing management organizational information; and

7 determining whether to return the requested data item value based on the
8 requestor having access to the employee information.

1 16. The data processing system implemented method recited above in claim 14,
2 further comprises:

3 prior to calling a security model for requestor security information, determining
4 whether the data item relates to employee information or financial information; and

5 determining whether to return the requested data item value based on the security
6 key.

1 17. The data processing system implemented method recited above in claim 2, prior
2 to identifying all data updated in the ancillary system since a last block transfer of data to
3 the data processing system the method further comprises:

4 monitoring a clock for a predetermined time interval.

1 18. The data processing system implemented method recited above in claim 1,
2 wherein the ancillary system is a first ancillary system and the request is a first request
3 for a first value for a first data item, the method further comprises:

4 receiving a second request for the value of a second data item;

5 identifying an auxiliary datastore associated with the second data item; and

6 retrieving the value for the data item from the auxiliary datastore.

1 19. The data processing system implemented method recited above in claim 18
2 further comprises:
3 identifying an ancillary system related to the auxiliary datastore;
4 identifying all data updated in the ancillary system since a last block transfer of
5 data to the auxiliary datastore;
6 requesting a block transfer of updated data from the ancillary system; and
7 copying the block of updated data to the auxiliary datastore.

1 20. The data processing system implemented method recited above in claim 1,
2 wherein the data is retrieved from the data processing system, the method further
3 comprises:
4 identifying all data updated in the ancillary system since a last block transfer of
5 data to the data processing system;
6 truncating a data table in the data process system, wherein the data table contains
7 data items derived from the data stored in the ancillary system;
8 requesting a block transfer of updated data from the ancillary system;
9 copying the block of updated data to the data processing system; and
10 reconstructing the data table with the updated data.

1 21. A computer-readable storage medium storing program instructions for execution
2 on a data processing system which when executed cause the data processing system to
3 perform a method for managing data from a plurality of ancillary systems comprising:
4 receiving a request for a value of a data item;
5 identifying an ancillary system associated with the requested data item;
6 determining whether data stored in the ancillary system is conducive to being
7 processed into the value;
8 retrieving the data from one of the ancillary system and the data processing
9 system based on whether data stored in the ancillary system is conducive to being
10 processed into the value;
11 processing the data into the value for the data item; and
12 returning the requested value for the data item.

1 22. The computer-readable storage medium recited above in claim 21, wherein the
2 data is retrieved from the data processing system, the method further comprises:
3 identifying all data updated in the ancillary system since a last block transfer of
4 data to the data processing system;
5 requesting a block transfer of updated data from the ancillary system; and
6 copying the block of updated data to the data processing system.

1 23. The computer-readable storage medium recited above in claim 22, wherein
2 processing the data into the value for the data item is performed subsequent to copying
3 and prior to receiving the request.

1 24. The computer-readable storage medium recited above in claim 22, wherein
2 processing the data into the value further comprised aggregating the data into a value for
3 the data item.

1 25. The computer-readable storage medium recited above in claim 21, wherein the
2 data item is financial information.

1 26. The computer-readable storage medium recited above in claim 22, wherein the
2 data processing system further comprises rules for managing data, said rules comprise:
3 rules for identifying an ancillary system that is associated with a data item; and
4 rules for determining whether data stored in the ancillary system is conducive to
5 being processed into the value.

1 27. The computer-readable storage medium recited above in claim 21, wherein the
2 data is retrieved from the ancillary system, and retrieving the data further comprises:
3 attempting to contact the ancillary system;
4 querying the ancillary system for the data; and
5 receiving the data from the ancillary system.

1 28. The computer-readable storage medium recited above in claim 21, wherein
2 retrieving the data from one of the ancillary systems and the data processing system
3 further comprises:
4 attempting to contact the ancillary system based on the data stored in the ancillary
5 system being conducive to being processed into the value; and
6 receiving the data from the ancillary system based on the ancillary system being
7 unresponsive.

1 29. The computer-readable storage medium recited above in claim 22, wherein the
2 ancillary system is a first ancillary system and the request is a first request for a first
3 value for a first data item, the method further comprises:
4 receiving a second request for a value of a second data item;
5 identifying a second ancillary system associated with the second data item;
6 determining whether data stored in the second ancillary system is conducive to
7 being processed into the value;
8 retrieving the data from the second ancillary system based on the data stored in
9 the second ancillary system being conducive to being processed into the value;
10 processing the data into the value for the second data item; and
11 returning the requested value for the second data item.

1 30. The computer-readable storage medium recited above in claim 21 further
2 comprises:
3 catching a message, wherein the message was generated by an ancillary system
4 using a set of content rules and the message conforms to a message standard;
5 opening the message;
6 identifying the ancillary system based on the message;
7 accessing content conversion rules based on the identity of the ancillary system;
8 converting content from the message to enterprise information using the content
9 conversion rules; and
10 storing the enterprise information in the data processing system.

1 31. The computer-readable storage medium recited above in claim 27, wherein the
2 ancillary system is a first ancillary system and the request is a first request for a first
3 value for a first data item, the method further comprises:
4 receiving a second request for a value of a second data item;
5 identifying a second ancillary system associated with the second data item;
6 determining whether data stored in the second ancillary system is conducive to
7 being processed into the value;
8 retrieving the data from the data processing system based on the data stored in the
9 second ancillary system not being conducive to being processed into the value;
10 processing the data into the value for the second data item; and
11 returning the requested value for the second data item.

1 32. The computer-readable storage medium recited above in claim 21, wherein the
2 data item is a line item in a document.

1 33. The computer-readable storage medium recited above in claim 21, wherein the
2 data item relates to financial information, and the financial information is in a document.

1 34. The computer-readable storage medium recited above in claim 21, wherein prior
2 to identifying an ancillary system associated with the requested data item the method
3 comprises:
4 calling a security model for requestor security information;
5 receiving the requestor security information from the security model; and
6 accessing a security key related to the requested data item based on the requestor
7 security information.

1 35. The computer-readable storage medium recited above in claim 21, wherein prior
2 to identifying an ancillary system associated with the requested data item the method
3 comprises:

4 determining whether the data item relates to employee information or financial
5 information;

6 accessing management organizational information; and

7 determining whether to return the requested data item value based on the
8 requestor having access to the employee information.

1 36. The computer-readable storage medium recited above in claim 34, further
2 comprises:

3 prior to calling a security model for requestor security information, determining
4 whether the data item relates to employee information or financial information; and

5 determining whether to return the requested data item value based on the security
6 key.

1 37. The computer-readable storage medium recited above in claim 22, prior to
2 identifying all data updated in the ancillary system since a last block transfer of data to
3 the data processing system, the method further comprises:

4 monitoring a clock for a predetermined time interval.

1 38. The computer-readable storage medium recited above in claim 21, wherein the
2 ancillary system is a first ancillary system and the request is a first request for a first
3 value for a first data item, the method further comprises:

4 receiving a second request for a value of a second data item;

5 identifying an auxiliary datastore associated with the second data item; and

6 retrieving the value for the data item from the auxiliary datastore.

1 39. The computer-readable storage medium recited above in claim 38 further
2 comprises:
3 identifying an ancillary system related to the auxiliary datastore;
4 identifying all data updated in the ancillary system since a last block transfer of
5 data to the auxiliary datastore;
6 requesting a block transfer of updated data from the ancillary system; and
7 copying the block of updated data to the auxiliary datastore.

1 40. The computer-readable storage medium recited above in claim 21, wherein the
2 data is retrieved from the data processing system, the method further comprises:
3 identifying all data updated in the ancillary system since a last block transfer of
4 data to the data processing system;
5 truncating a data table in the data process system, wherein the data table contains
6 data items derived from the data stored in the ancillary system;
7 requesting a block transfer of updated data from the ancillary system;
8 copying the block of updated data to the data processing system; and
9 reconstructing the data table with the updated data.

1 41. An enterprise data processing system for managing ancillary data from a plurality
2 of ancillary systems comprising:
3 an enterprise data processor;
4 an enterprise database for storing data, ancillary system access rules, and ancillary
5 data processing rules, said enterprise database being operationally connected to said
6 enterprise data processor;
7 an ancillary system data transfer mechanism for transferring data from a plurality
8 of ancillary systems based on whether data stored in an ancillary system is conducive to
9 being processed into a data item value, said ancillary system data transfer mechanism
10 being operationally connected to the plurality of ancillary systems.

1 42. The enterprise data processing system recited above in claim 41, wherein the
2 ancillary system data transfer mechanism identifies all data updated in the ancillary
3 system since a last block transfer of data to the enterprise database;
4 requesting a block transfer of updated data from the ancillary system; and
5 copying the block of updated data to the enterprise database.

1 43. The enterprise data processing system recited above in claim 42, wherein the
2 ancillary system data transfer mechanism processes the data into the data item value
3 subsequent to copying.

1 44. The enterprise data processing system recited above in claim 42, wherein the
2 ancillary system data transfer mechanism processes the data into the value further
3 comprising an aggregator for aggregating the data into a value for the data item.

1 45. The enterprise data processing system recited above in claim 41, wherein the data
2 item is financial information.

1 46. The enterprise data processing system recited above in claim 42, wherein the
2 enterprise database stores rules for identifying an ancillary system that is associated with
3 a data item and rules for determining whether data stored in the ancillary system is
4 conducive to being processed into the value.

1 47. The enterprise data processing system recited above in claim 41, wherein the
2 ancillary system data transfer mechanism further comprises:
3 communication connections for contacting the ancillary system and receiving data
4 therefrom; and
5 logic for querying the ancillary system for the data; and
6 receiving the data from the ancillary system.

1 48. The enterprise data processing system recited above in claim 41, wherein the
2 enterprise is a healthcare provider.

1 49. The enterprise data processing system recited above in claim 1 further comprises:
2 an automated interface for catching messages and redirecting the messages to the
3 ancillary system data transfer mechanism.

1 50. The enterprise data processing system recited above in claim 1, wherein the data
2 item relates to either enterprise employee information or financial information.

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